

C. Remarks

Based on the above-mentioned amendments and the comments that follow, reconsideration of this application is respectfully requested.

In the office action, claims 1-11, 13-25, and 27 were rejected under 35 U.S.C. § 102 as being anticipated by Kirsch. In addition, claims 12 and 26 were rejected under 35 U.S.C. § 103 as being anticipated by Kirsch in view of Olstad.

In response to the office action, 13 and 27 have been currently amended. In light of the above, Applicants respectfully submit that the present claims are distinct, and therefore, patentable over the cited art. Claims 1, 12, 14-19, 22-23, and 25-26 have been amended solely to correct minor typographical errors and not for any reasons of patentability.

C.1. Descriptions and Differences of the Claims from the Cited Art:

Claims 1-12

Claim 1 recites that identifies infrequent words that occur in less than a threshold number of documents. Kirsch does not teach this feature of claim 1. Kirsch, at column 2, lines 8-14, discloses that certain words that appear too frequently within a document collection and are thus preemptively excluded from the search. The cited portion of Kirsch, column 2, lines 25-32 and lines 47-53, state that the relevancy of a search result can be determined by a relevancy score based on the combined frequency of occurrence of the query terms on a per document basis and/or with proximity information based on stored location-of-occurrence information with a particular document. Neither the relevancy

score nor proximity information teach or suggest identifying infrequent words that occur in less than a threshold number of documents. Specifically, there is nothing in Kirsch that suggests determining the frequency of a word, much less an infrequent word, based on occurrence in a number of documents. Rather, Kirsch teaches finding frequency of search words (not indexed words) on a per-document basis. Thus, the cited art does not teach or suggest the features of claim 1 as recited, and Applicant respectfully requests withdrawal of the rejection.

Claim 1 also recites, *inter alia*, an infrequent word index, maintained separately from the frequent word index, that maps the location of documents that contain the infrequent words. As noted above, Kirsch does not teach or suggest determining infrequent words, and thus cannot teach or suggest an infrequent word index.

Moreover, even if Kirsch taught an infrequent word index, Kirsch does not teach or suggest maintaining such infrequent word index separately from a frequent word index. More particularly, the cited portion of Kirsch, col. 6, lines 64-67, states “The indexes 30, 34, 38 are preferably kept as separate databases However, the indexes 30, 34, 38 of Kirsch are not analogous to the recited frequent and infrequent word indexes of claim 1. Specifically, Kirsch’s index 30 is an incremental index which exists as a repository for document records derived from documents obtained through the dynamic updates (see Kirsch, column 6, line 66-column 7, line 2); Kirsch’s index 34 is a secondary index which may be operated as a staging index from the incremental index to the main index

38 or as a substantial peer to the main index 38 (see Kirsch, col. 7, lines 37-41); and Kirsch's index 38 is the main index of all document records. Thus, Kirsch's indexes 30, 34, 38 are merely complete documents records for all or a portion of the documents that are indexed – and are not separate out indexes based on frequent or infrequent words. As a result, Kirsch does not teach or suggest maintaining word indexes separately, much less a frequent and infrequent word index.

Therefore, Kirsch does not teach or suggest the features of claim 1. Accordingly, Applicants respectfully request that claim 1 distinguishes over the cited art, and the rejection on claim 1 be withdrawn. Claims 2-12 depend from claim 1, and thus are patentable for at least the foregoing reasons.

Claims 13-18

Independent claim 13, as amended, recites, *inter alia*, scanning the set of documents and gathering infrequent words that occur in a number of documents of the set of documents that is less than a threshold amount and constructing an infrequent word index that maps the infrequent words to locations of documents that contain the infrequent words. As noted above with respect to claim 1, Kirsch does not teach or suggest evaluating frequency based on a number of documents, but rather a frequency in a particular document. Moreover, the frequency in a particular document is evaluated based on a search term to generate a relevancy score, not to construct an infrequent word index, as recited in claim 13.

Claim 13 also recites, *inter alia*, constructing a frequent word index, separately maintained from the infrequent word index. As noted above with respect to claim 1, Kirsch does not teach or suggest a frequent and infrequent word index, much less maintaining such indexes separately. Thus, Kirsch does not teach or suggest the features of claim 13.

Accordingly, claim 13 patentably distinguishes over the cited reference, and Applicant respectfully requests withdrawal of the rejection. Claims 14-17 depend from claim 13, and are patentable for at least the foregoing reasons. Claim 18 recites a computer readable medium for performing the steps as recited in claim 13, and is also patentable for at least the foregoing reasons.

Claims 19-26

Independent claim 19, as amended, recites, *inter alia*, identifying infrequent words that occur in less than a threshold number of documents and maintaining, separately from the frequent word index, an infrequent word index that maps the location of documents that contain the infrequent words. Kirsch does not teach or suggest these features of claim 19. Specifically, as noted above with respect to claim 1, Kirsch teaches determining a frequency of query terms in a particular document to determine a relevancy score for that document. As a result, Kirsch does not teach or suggest determining index words that appear in a number of documents, much less identifying infrequent words that occur in less than a threshold number of documents as recited in claim 19. Moreover, even if Kirsch taught identifying infrequent words that occur in less

than a threshold number of documents, Kirsch does not teach or suggest maintaining, separately from the frequent word index, an infrequent word index. As noted above with respect to claim 1, Kirsch does not teach or suggest maintaining separate word indexes, but rather teaches maintaining separate document record indexes, where each document record is a complete record for a particular document and not separated based on frequent or infrequent words. As a result, claim 19 distinguishes the cited reference of Kirsch.

Accordingly, Claim 19 is patentable over the cited reference, and Applicant respectfully requests withdrawal of the rejection. Claims 19-26 depend from claim 19 and are patentable for at least the foregoing reasons.

Claim 27

Independent claim 27, as amended, recites, *inter alia*, means for scanning the set of documents and gathering infrequent words that occur in a number of documents that is less than a threshold amount and means for constructing an infrequent word index, separately maintained from the frequent word index, that maps the infrequent words to locations of documents that contain the infrequent words. Kirsch does not teach or suggest these features of claim 27. Specifically, as noted above with respect to claim 1, Kirsch teaches determining a frequency of query terms in a particular document to determine a relevancy score for that document. As a result, Kirsch does not teach or suggest gathering index words that appear in a number of documents, much less gathering infrequent words that occur in a number of documents that is less than a

threshold amount as recited in claim 27. Moreover, even if Kirsch taught gathering infrequent words that occur in a number of documents that is less than a threshold amount, Kirsch does not teach or suggest maintaining, separately from the frequent word index, an infrequent word index. As noted above with respect to claim 1, Kirsch does not teach or suggest maintaining separate word indexes, but rather teaches maintaining separate document record indexes, where each document record is a complete record for a particular document and not separated based on frequent or infrequent words. As a result, claim 27 distinguishes the cited reference of Kirsch.

Accordingly, Claim 27 is patentable over the cited reference, and Applicant respectfully requests withdrawal of the rejection.


C.2. Conclusion

In view of the above, it is submitted that the claims are patentably distinct over the cited art and that all the rejections to the claims have been overcome and notice to that effect is earnestly solicited. Reconsideration and reexamination of the present application is requested. If the Examiner has any questions regarding this matter, the Examiner is requested to telephone Applicants' attorney at the numbers listed below prior to issuing a further Office Action.

If this response is not considered timely filed and if a request for an extension of time is otherwise absent, Applicants hereby request any necessary extension of time. If there is a fee occasioned by this response, including an extension fee that is not covered by an enclosed check please charge any deficiency to Deposit Account No. 50-0463.

Respectfully submitted,
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